

1 **RETRACTABLE EXTENSION CORD HOUSING HAVING A LOW-**
2 **PROFILE PLUG HOLDER**

3 **BACKGROUND OF THE INVENTION**

4 1. Field of the Invention

5 The present invention relates to a retractable extension cord housing,
6 and more particularly to a retractable extension cord housing having a low-
7 profile plug holder to make the retractable extension cord housing neat and
8 conveniently hold and protect the plug for storage.

9 2. Description of Related Art

10 Extension cords are widely used in many applications in daily life. Long
11 extension cords are often mounted in a retractable extension cord housing so the
12 unnecessary part of the extension cord is retracted and held in the retractable
13 extension cord housing. The extension cord except for the plug is retracted into
14 the retractable extension cord housing . The exposed plug makes the housing
15 appear unsightly and messy and allows the plug to be damaged. To overcome the
16 situation and make the housing tidy, various kinds of extension cord housings
17 have a feature to the hold the plug outside.

18 Such conventional features consists of pulling the extension cord taut
19 into the housing so only the plug is exposed. However, the entire housing is still
20 unsightly unless the plug is hidden. Another method to hold the plug consists of
21 defining a notch in the housing to hold a portion of the extension cord adjacent
22 the plug in the notch to hold the plug. However, the aforementioned problem is
23 still not solved.

24 To overcome the shortcomings, the present invention provides a

1 retractable extension cord housing with a low-profile plug holder that can hold
2 and hide a low-profile plug connected to the extension cord to mitigate or
3 obviate the aforementioned problems.

4 SUMMARY OF THE INVENTION

5 The main objective of the invention is to provide a retractable extension
6 cord housing with a low-profile plug holder that can hold and hide a low-profile
7 plug connected to an extension cord that is retractably held to the retractable
8 extension cord housing such that the retractable extension cord housing as a
9 whole appears neat and clean.

10 To achieve the aforesaid objectives, a retractable extension cord housing
11 with a low-profile plug holder in accordance with the present invention
12 comprises a hollow body, an extension cord and a plug holder.

13 The plug holder comprises a plug recess, a cord groove and optionally a
14 retaining tab and is to hold a low-profile plug and a segment of an extension cord
15 attached to the low-profile plug. Therefore, the entire retractable extension cord
16 housing appears neat and clean.

17 Other objectives, advantages and novel features of the invention will
18 become more apparent from the following detailed description when taken in
19 conjunction with the accompanying drawings.

20 BRIEF DESCRIPTION OF THE DRAWINGS

21 Fig. 1 is a bottom perspective view of a retractable extension cord
22 housing in accordance with the present invention; and

23 Fig. 2 is a partially exploded bottom perspective view of the extension
24 cord housing in Fig. 1.

DETAILED DESCRIPTION OF PREFERRED EMBODIMENT

With reference to Figs. 1 and 2, a retractable extension cord housing (10) having a low-profile plug holder (not numbered) in accordance with the present invention comprises a hollow body (11) that retractably holds an extension cord (20). The hollow body (11) has a top, a bottom, an external surface (not numbered), an outer edge (not numbered), an optional handle (12) and two half shells (13). The optional handle (12) is formed on the outer edge. The half shells (13) are connected to each other to form the hollow body (11) such that the extension cord (20) is retractably mounted in the hollow body (11).

The extension cord (20) has a proximal end (not numbered), a distal end (not numbered) and a low-profile plug (21) and is retractably mounted in the hollow body (11). The proximal end is securely attached to the hollow body (11), and the low-profile plug (21) has two conducting prongs (211) and a grounding prong (212), is attached to the distal end outside the hollow body (11) and is selectively mounted in the plug holder. The prongs (211, 212) selectively connect electrically to an electrical outlet (not shown). The two conducting prongs (211) are separated by a distance from each other. The grounding prong (212) is conventionally circular and has an outside diameter.

The plug holder is defined in the bottom external surface of the hollow body (11) and comprises a plug recess (15), a cord groove (16) and optionally a retaining tab (17). The plug recess (15) is defined in the external surface of one of the half shells (13) and has a tapered top opening (151), a bottom (not numbered), a rectangular hole (152) and a circular hole (153). The rectangular hole (152) is formed in the bottom of the plug recess (15) and has a length that is

1 slightly shorter than the distance between the two conducting prongs (211). The
2 circular hole (153) is also formed in the bottom of the plug recess (15) and has an
3 inside diameter that is larger than the outside diameter of the grounding prong
4 (212).

5 The cord groove (16) is curved and is formed in the bottom external
6 surface of the hollow body (11) between the plug recess (15) and the outer edge
7 of the hollow body (11) of the housing (10). The retaining tab (17) is optionally
8 formed on the outer edge of the hollow body (11) of the housing (10) near the
9 cord groove (16) to hold the cord (20) in the groove (16).

10 To mount the low-profile plug (21) in the plug holder, a portion of the
11 cord (20) that extends outside the housing (10) is placed in the cord groove
12 (16). The conducting prongs (211) and the grounding prong (212) of the low-
13 profile plug (21) are pressed respectively into the rectangular hole (152) and the
14 circular hole (153) so the low-profile plug (21) will be held in the plug recess
15 (15).

16 Consequently, since the conducting prongs (211) are jammed into
17 rectangular hole (152), the low-profile plug (20) is firmly held in the plug recess
18 (15), is flush with the bottom external surface of the hollow body (11) and is
19 hidden in the plug recess (15). The appearance of the retractable extension cord
20 housing (10) as a whole is neat and clean. The tapered top opening (151) in the
21 plug recess (15) causes an annular gap (not numbered) to be formed around the
22 low-profile plug (20) when the low-profile plug (20) is inserted into the plug
23 recess (15). The annular gap allows a person to conveniently grasp and remove
24 the low-profile plug (20) from the plug recess (15).

1 Even though numerous characteristics and advantages of the present
2 invention have been set forth in the foregoing description, together with details
3 of the structure and function of the invention, the disclosure is illustrative only,
4 and changes may be made in detail, especially in matters of shape, size, and
5 arrangement of parts within the scope of the appended claims.